SUPPORT SERVICES

Energy Conservation

I. Overview

A. Every employee and student is expected to contribute to the School Division’s efforts to conserve energy and natural resources. This regulation is intended to support the goals and requirements of Policy 494, Energy Conservation.

B. The School Division is committed to, and responsible for, a safe and healthy learning environment.

C. School Division administration will regularly communicate the importance and impact of the energy conservation program to its internal and external constituents.

D. The Administrative Coordinator, Energy Management, will coordinate and implement the overall energy policy and enforce the parameters of this supporting regulation through the utilization of Energy Education Coordinators. He/she will work closely with each site administrator and the custodial staff in order to identify opportunities to improve the efficient use of utilities on each site, and will educate and encourage faculty and staff wherever possible.

E. The site administrator is responsible for utility usage at their site. He/she shall promote the energy policy and guidelines to the extent that they conform to the School Division’s primary goal: Providing A World-Class Education to students in a welcoming, safe, and healthful environment.

F. The teachers/staff members at each school site or office are responsible for utility usage in their own classroom or work areas. Teachers are encouraged to incorporate energy-related curriculum and energy-related student responsibilities into their classroom. Many resources are available from the Office of Facilities Services through the Administrative Coordinator, Energy Management, directly.

G. The custodial staff at each site is responsible for ensuring the complete and total shutdown of the facility at the end of the workday. During the day, custodial staff should perform routine spot-checks around the site to see that all unnecessary lighting in unoccupied areas is turned off, doors are closed if the heating or air conditioning is on, and report any water leaks or other waste to the Office of Facilities Services.

H. At night, custodial staff should turn on lights only in the areas in which they are working, and maintain the minimum additional lighting for safe passage.

I. A school closure of two or more days will be viewed as an "energy conservation opportunity." The custodial staff is responsible for the complete and total shutdown of the school building when closed for weekends and during extended vacation.
J. Appliances for personal convenience (e.g. fans, personal coffee makers, personal refrigerators, etc.) are prohibited without prior approval from the Administrative Coordinator, Energy Management. Use of School Division appliances provided in lounge areas and break rooms is encouraged.

K. The Energy Education Coordinator performs routine “walk-through” audits of all facilities and communicates the audit results to the appropriate personnel.

L. The Energy Education Coordinator may direct, in cooperation with the Administrative Coordinator, Energy Management, and Administrative Coordinator, HVAC, adjustments to the Building Automation System (BAS), including temperature settings and run times for Heating, Ventilation, and Air Conditioning (HVAC) and other controlled equipment.

M. The energy conservation program shall provide regular (at least semi-annual) program update reports to the School Board.

N. The Energy Education Coordinator provides monthly energy savings reports to facility administrators detailing performance results.

II. Heating, Ventilation and Air Conditioning

A. Doors leading to instructional spaces shall remain closed while HVAC is operating. Ensure doors between conditioned space and non-conditioned space remain closed at all times (e.g., between hallways and gym).

B. Proper and thorough utilization of data loggers will be initiated and maintained to monitor relative humidity, temperature, and light levels throughout the organization's facilities to ensure compliance with organization guidelines.

C. All exhaust fans should be turned off daily.

D. All new and replacement equipment purchased must incorporate technology that maximizes energy efficiency, yet provides a suitable return on investment. ENERGY STAR qualified products, or products with a higher efficiency rating that have not gone through this qualification process, will be purchased if these alternatives are available, and they provide the required cost, performance, and functionality for the purchaser.

E. HVAC systems should always be operated in the most economical and efficient way possible, and only for the amount of time required to provide the required climate for a specific activity.

F. It is acceptable to operate the system fan with windows and doors open, if the HVAC unit is equipped with a thermostat that can be changed to "fan on" mode with the heating or cooling controls off.

G. If equipped, window blinds/drapes are to be closed at the end of the day.

H. HVAC technicians should routinely adjust HVAC system time clocks and energy management systems (BAS) for optimal run times considering changes in operating schedules, weather, and daylight saving time.
I. The following temperatures shall be maintained during the instructional day. If the teacher elects, they may request space conditioning while they are working outside of the regular instructional day, as well as for special activities such as open house, PTA meetings, etc.

<table>
<thead>
<tr>
<th>Cooling Season Occupied Set Points:</th>
<th>74°F – 78°F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unoccupied Cooling Set Point:</td>
<td>85°F</td>
</tr>
<tr>
<td>Heating Season Occupied Set Points:</td>
<td>68°F – 72°F</td>
</tr>
<tr>
<td>Unoccupied Heating Set Point:</td>
<td>55°F</td>
</tr>
</tbody>
</table>

J. On vacation days, weekends, and holidays, the HVAC system shall be off unless an approved activity is in session.
   1. Teachers and staff who have permission to access their classrooms or work areas may request space conditioning during the time that they are working.
   2. In offices that are occupied by regularly assigned staff, zoning shall be used in lieu of operating the central plant. Maximum thermostat settings for zoned areas shall be the same as instructional day operation.

K. Normal air conditioning and ventilation may be provided for scheduled activities and athletic contests. If possible, only the area of the activity should be conditioned and ventilated, and temperature maximums shall be the same as a typical instructional day.

L. Space heaters are not to be used in classrooms or work areas unless authorized by the Administrative Coordinator, Energy Management, or the Administrative Coordinator, HVAC, on a case-by-case basis.

M. Thermostats for domestic water heaters will be set so that the indicator dial is between medium and hot. Water heaters shall be set on vacation setback whenever practicable.

N. During unoccupied times, the air conditioning equipment shall be off. The unoccupied period begins when the students leave the area at the end of the instructional period. It is anticipated that the temperature of the instruction room will be maintained long enough to afford comfort for the period the staff remains in the instruction room after the students have left.

O. Air conditioning start times may be adjusted (depending on weather) to ensure instruction room comfort when instruction begins.

P. Outside air dampers will be closed during unoccupied times.

Q. Ceiling fans should be operated in all areas that have them.
R. Relative humidity levels shall not exceed 60 percent for any 24-hour period.
S. Air conditioning should not be utilized in facilities during the summer months unless the facilities are being used for summer school or scheduled activities.
T. Cross-ventilation shall be utilized during periods of mild weather. Cross-ventilation is defined as having windows and/or doors open to the outside on each side of a room. HVAC equipment shall be turned off and the temperature adjusted using open doors and windows.
U. Ensure dry food storage areas are maintained within code requirements. Typically, this is 55°F–75°F temperature and 35%–60% Relative Humidity. Utilize loggers to verify.
V. During the spring and fall when there is no threat of freezing, all steam and forced air heating systems should be switched off during unoccupied times. Hot water heating systems should be switched off using the appropriate loop pumps.
W. Ensure all domestic hot water systems are set no higher than 120°F or 140°F for cafeteria service (with dishwasher booster).
X. Ensure all domestic hot water re-circulating pumps are switched off during unoccupied times.
Y. For heat pumps with automatic changeover, ensure a 6 °F dead-band between heating and cooling modes.

III. Lighting

A. All new and replacement equipment purchased must incorporate technology that maximizes energy efficiency, yet provides a suitable return on investment. ENERGY STAR qualified products, or products with a higher efficiency rating that have not gone through this qualification process, will be purchased if these alternatives are available, and they provide the required cost, performance, and functionality for the purchaser.
B. Refrain from turning lights on unless definitely needed. Make certain that lights are off when leaving a room or office, even for a short period of time. Remember that lights not only consume electricity, but also give off heat that places an additional load on the air conditioning equipment and thereby increases the use of electricity necessary to cool the room.
C. Gymnasium, multi-purpose room, and cafeteria lights should not be left on unless these areas are occupied.
D. All outside lights should be turned off during daylight hours (custodial staff should ensure time clocks and light sensors are properly adjusted).
E. Hallway and "commons" area lighting should be turned off at the end of the instructional day.
F. Safety lighting will be held to the minimum level necessary for safe passage.
G. Wherever possible, partial lighting and use of the classroom’s natural lighting should be encouraged.

H. All outside lighting shall be off during daylight hours.

I. Site lighting, to include lighting used for athletic and extracurricular activities, should only be energized while the illuminated area is being utilized.

J. All lights will be turned off when students and staff leave for the day. Custodial staff will turn on lights only in the areas in which they are working.

IV. Computer Equipment

A. All office machines (copy machines, laminating equipment, etc.) shall be switched off each night and during unoccupied times. Fax machines should remain on as required.

B. All computers should be turned off each night. This includes the monitor, local printer, and speakers except as otherwise directed under Regulation 295-1. Network equipment is excluded.

C. All capable PC’s and monitors should be programmed for the “energy saver” mode using the power management feature. If network constraints restrict this for the PC, ensure the monitor “sleeps” after 10 minutes of inactivity. Screensavers do not save energy. If used, they should only be enabled during the time between which computer activity stops and the sleep mode starts.

D. All new and replacement equipment purchased should incorporate technology that maximizes energy efficiency, yet provides a suitable return on investment. ENERGY STAR qualified products, or products with a higher efficiency rating that have not gone through this qualification process, will be purchased if these alternatives are available, and they provide the required cost, performance, and functionality for the purchaser.

E. Computers, copy machines, and all other office equipment are expected to be used at their most efficient level. This includes computer monitor and copy machine sleep mode programming during the day, and complete system (CPU, monitor, and peripherals) shutdown at night. Users are asked to turn off their computer equipment before they leave at the end of the work day. Any PCs that are connected to the School Division’s network, which are found on at night, will be automatically shut down by the Energy Education Coordinator if the user is not active on the equipment, in accordance with Regulation 295-1.

F. Server, networking, and remote access computers, as well as fax machines, shall remain on at all times as required.

G. Each computer (except servers) when used, need only to be turned on, and then off once per day. Equipment should be turned on only when it's about to be used by staff or students.
V. Water Conservation

A. All new and replacement automatic watering equipment purchased must incorporate technology that maximizes irrigation efficiency, yet provides a suitable return on investment.

B. Report broken flush valves, sprinkler heads, and any water leaks and over-spray conditions to the Office of Facilities Services.

C. Do not use water rinse-down methods to clean lunch or other outside common areas. Use dry sweep methods or spot cleaning methods wherever possible.

D. Ensure all plumbing and/or intrusion (i.e., roof) leaks are reported and repaired immediately.

E. Grounds watering should only be done between 4–10 a.m. Do not water during the heat of the day, typically between 10 a.m.–8 p.m.

F. When spray irrigating, ensure the water is appropriately applied to the intended surface.

G. Install water sub-meters on irrigation and cooling tower supply lines to eliminate sewer charges.

The Associate Superintendent for Finance and Support Services (or designee) is responsible for implementing and monitoring this regulation.

The Associate Superintendent for Finance and Support Services (or designee) is responsible for reviewing this regulation in 2020.